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DATE: MAY 12, 2008

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FROM: GARY P. OAKESON

**QUR DOCKET NO.: 200315570-1** 

FOR: PIGMENTED INK-JET INKS WITH IMPROVED PRINT QUALITY AND

RELIABILITY

SUBJECT: APPEAL BRIEF UNDER 37 C.F.R. § 41.37

Commissioner For Patents PO Box 1450 Alexandria, VA 22313-1450

Dear Sir/Madam:

Attached please find an Appeal Brief under 37 C.F.R. § 41.37 for Docket No. 200315570-1, Application No. 10/807,025.

Thank you. We await your confirmation of receipt.

Respectfully submitted,

Gary P. Dakeson THORPE NORTH & WESTERN, LLP

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PATENT APPLICATION **REWLETT-PACKARD COMPANY** Intellectual Property Administration 200315570-1 P.O. Box 272400 ATTORNEY DOCKET NO. Fort Collins, Colorado 80527-2400 IN THE UNITED STATES PATENT AND TRADEMARK OFFICE Confirmation No.: 2239 Inventor(s): Zia Ur Rehman Examiner: Edward J. Caln Application No.: 10/807,026 Group Art Unit: 1796 Filing Date: 03/22/2004 Title: Pigmented Ink-Jet Inks With Improved Print Quality and Reliability Mail Stop Appeal Brief-Patents Commissioner For Palents PO Box 1450 Alexandria, VA 22313-1450 TRANSMITTAL OF APPEAL BRIEF Transmitted herewith is the Appeal Brief in this application with respect to the Notice of Appeal filed on The fee for filing this Appeal Brief is (37 CFR 1.17(c)) \$500.00. (complete (a) or (b) as applicable) The proceedings herein are for a patent application and the provisions of 37 CFR 1.136(a) apply. [X](a) Applicant politions for an extension of time under 37 CFR 1.136 (fees: 37 CFR 1.17(a)-(d)) for the total number of months checked below: 3rd Month 4th Month 2nd Month 1st Month \$1020 \$1590 \$450 The extension fee has already been filed in this application. (i) Applicant believes that no extension of time is required. However, this conditional petition is being made to provide for the possibility that applicant has inadvertently everlooked the need for a petition and fee for extension of time. . At any time during the pendency of this application, Please charge to Deposit Account 08-2025 the sum of \$\\_\$ 620 please charge any fees required or credit any over payment to Deposit Account 08-2025 pursuant to 37 CFR 1.25. Additionally please charge any fees to Deposit Account 08-2025 under 37 CFR 1.16 through 1.21 inclusive, and any other sections in Title 37 of the Code of Federal Regulations that may regulate fees. [😾] A duplicate copy of this transmittal letter is enclosed. [ ] I hereby certify that this correspondence is being Respectfully submitted, deposited with the United States Postal Service as first class mail in an envelope addressed to: Commissioner for Patents, Alexandria, VA 22313-1450 Date of Deposit: [X] I hereby certify that this paper is being transmitted to Attorney/Agent for Applicant(s) the Patent and Trademark Office facsimile number (571)273-8300. Reg No.: 44266 Date of facsimile: 05/12/2008 Date: · 05/12/2008 Typed Namo: Brenda Wisoman Telephone: (801) 566-6633

Signature: Kienda Collegence

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## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

CERTIFICATE OF APPELLANT: Zia Ur Rehman DEPOSIT UNDER 37 C.F.R. § 1.8 SERIAL NO .: 10/807,025 I hereby certify that this 3/22/2004 FILING DATE: correspondence is being transmitted via facsimile to the USPTO or being deposited with the United States CONF. NO.: 2239 Postal Service with sufficient postage as first class postage in an envelope PIGMENTED INK-JET INKS FOR: addressed to Commissioner for WITH IMPROVED PRINT Patents, P.O. Box 1450, Alexandria, QUALITY AND VA 22313-1450 on the date indicated RELIABILITY below. 1796 ART UNIT: Date of Deposit Edward J. Cain EXAMINER: Bundo Wiseman Brenda Wiseman

## APPELLANTS' APPEAL BRIEF UNDER 37 C.F.R. § 41.37

200315570-1

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450 Mail Stop Appeal Brief – Patents

Sir:

DOCKET NO.:

Appellants submit this Appeal Brief in connection with their appeal from the final rejection of the Patent Office, mailed January 15, 2008, in the above-identified application. A Notice of Appeal was filed on May 2, 2008, which was received by the Board of Appeals on May 2, 2008.

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APPEAL BRIEF Docket No. 200315570-1

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### L REAL PARTY IN INTEREST

The real party in interest is Hewlett-Packard Development Company, LP, a limited partnership established under the laws of the State of Texas and having a principal place of business at 20555 S.H. 249 Houston, TX 77070, U.S.A. (hereinafter "HPDC"). HPDC is a Texas limited partnership and is a wholly-owned affiliate of Hewlett-Packard Company, a Delaware Corporation, headquartered in Palo Alto, CA. The general or managing partner of HPDC is HPQ Holdings, LLC.

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# II. RELATED APPEALS AND INTERFERENCES

Appellants and Appellants' legal representatives know of no other appeals or interferences that will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

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#### III. STATUS OF CLAIMS

Claims 1-6, 8-9, 11-19, 21-26, and 28-29 remain pending and have been rejected. Claims 7, 10, 20, 27, and 30 have been canceled. The claims on appeal in this application are claims 1-6, 8-9, 11-19, 21-26, and 28-29.

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#### IV. STATUS OF AMENDMENTS

An amendment to claims 1, 11, and 21 was submitted by Appellants on March 14, 2008 after the Final Office Action mailed on January 15, 2008. The amendment was entered by the Examiner.

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#### V. SUMMARY OF CLAIMED SUBJECT MATTER

- 1. A system for printing images on a substrate, comprising (page 3, lines 6-7; page 6, lines 12-13):
  - a) an ink-jet ink including (page 3, lines 7-8; page 6, line 13):
    - i) a liquid vehicle including water, and from 5 wt% to 35 wt% total organic solvent content (page 3, lines 10-11; page 6, lines 16-17), wherein the organic solvent content includes at least three of 1,5-pentanediol, ethoxylated glycerol, 2-pyrrolidinone, and 2-methyl-1,3-propanediol (page 16, lines 7-9; page 18, Table 1);
    - ii) from 0.1 wt% to 6 wt% of acid-functionalized pigment solids (page 3, lines 8-9; page 6, lines 14-15);
    - from 0.001 wt% to 6 wi% of styrene-malcic anhydride copolymer (page 3, lines 9-10; page 6, lines 15-16), said styrene-malcic anhydride copolymer having a weight average molecular weight from about 400 Mw to 15,000 Mw (page 3, lines 11-13; page 6, lines17-19).
- b) a printhead loaded with the ink-jet ink (page 3, line 7; page 6, lines 13-14) and configured for jetting the ink-jet ink at a firing frequency from 12 kHz to 25 kHz (page 7, lines 27-29), and wherein the frequency response range for the ink-jet ink is such that the ink-jet ink is jettable at from 3 kHz to 25 kHz (page 7, line 30 page 8, line 1).
- 11. A method of rapidly printing an ink-jet image (page 3, line 14; page 6, line 20), comprising ink-jetting an ink-jet ink onto a media substrate at a firing frequency

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from 12 kHz to 25 kHz (page 3, lines 15-16; page 6, lines 21-22), said ink-jet ink comprising (page 3, line 16; page 6, line 22):

- a) a liquid vehicle including water, and from 5 wt% to 35 wt% total organic solvent content (page 3, lines 18-19; page 6, lines 24-25), wherein the organic solvent content includes at least three of 1,5-pentanediol, ethyoxylated glycerol, 2-pyrrolidinone, and 2-methyl-1,3-propanediol (page 16, lines 7-9; page 18, Table 1);
- b) from 0.01 wt% to 6 wt% of acid-functionalized pigment solids (page 3, lines 16-17; page 6, lines 22-23);
- c) from 0.001 wt% to 6 wt% of styrene-maleic anhydride copolymer (page 3, lines 17-18; page 6, lines 23-24), said styrene-maleic anhydride copolymer having a weight average molecular weight from about 400 Mw to 15,000 Mw (page 3, lines 19-21; page 6, lines 25-27),

wherein the frequency response range for the ink-jet ink is such that the ink-jet ink is jettable at from 3 kHz to 25 kHz (page 7, line 30 - page 8, line 1).

- 21. An ink-jet ink composition, comprising (page 3, line 22; page 6, line 28):
- a liquid vehicle having from 5 wt% to 35 wt% of total organic solvent content (page 3, lines 24-26; page 6, line 31 page 7, line 1), wherein the organic solvent content includes at least three of 1,2-pentancdiol, ethoxylated glyccrol, 2-pyrrolidinone, and 2-methyl-1,3-propanediol (page 16, lines 7-9; page 18, Table 1);
- b) from 0.1 wt% to 6 wt% of acid-functionalized pigment solids (page 3, line 23; page 6, line 29);

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c) from 0.001 wt% to 6 wt% of styrene-malcic anhydride copolymer

(page 3, lines 23-24; page 6, lines 29-30), said styrene-malcic

anhydride copolymer having a weight average molecular weight from
about 400 Mw to 15,000 Mw (page 3, lines 26-27; page 7, lines 1-2);

wherein the ink-jet ink composition is reliably jettable at all firing frequencies ranging
from 3 kHz to 25 kHz (page 7, line 30 -- page 8, line 1).